REMARKS

Amendments have been made to the specification to correct an error in the text and to more clearly define and clarify the meaning of Claim 1. No new matter has been added. Applicants urge entry of Table 4 and accompanying text. Even though this subject matter was clearly disclosed in Claim 1, this amendment was made to the specification in response to Examiner's rejection of claims under 35 USC §112 to clearly demonstrate that Applicants were, in fact, in possession of the claimed invention. Moreover, entry of the amendment will place the application in better condition for allowance.

Rejection under 35 USC §112

Claims 1-34 are rejected under 35 USC 112, first paragraph. Applicants traverse the rejection.

Rejection is based on the assertion that demonstration of efficacy of the claimed hydrogen getter material at 10 Torr was not considered to be indicative of all pressures up to 760 Torr. Notwithstanding the rather disingenuous suggestion that while a hydrogen getter material will operate effectively at 10 Torr and 760 Torr it is inoperative at pressures between the two, Applicants have provided, by amendment to the specification, experimental verification of the subject matter claimed in base Claim 1. Moreover, lack of literal support is not enough to support a rejection under §112, *In re Wertheim,* 541 F. 2d 257, 191 USPQ 90. Based on the amendment to the specification, clearly defining the meaning of Claim 1, Applicants urge that the rejection of claims 1-34 has been overcome and request reconsideration and withdrawal of the objection.

Rejection under 35 USC §103

Claims 1-33 are rejected under 35 USC §103(a) as being unpatentable over Shepodd in view of Streitwieser and Morikawa. Applicants traverse the rejection.

Rejection appears to be based on Examiner's assertion that because Shepodd suggests hydrogenation reactants for hydrogen gettering at subatmospheric conditions this would lead one of ordinary skill in the art to liberally interpret the Morikawa disclosure outside its strict constraints. And that these constraints are informed by economic conditions surrounding rapidly making hydrogenated products.

In response, Applicants note that nowhere does Shepodd treat the hydrogenation of phenyl rings (p. 5, 1-5). Rather Shepodd discloses hydrogenation of double or triple bonded alkanes and organic polymers (5,624,598, 5,703,378, 6,110,397 and 5,837,158) and silicone rubber (5,908,325). Extrapolating Morikawa to disregard the explicit statement that no "sufficent" hydrogenation can be obtained at pressures below 1 atmosphere because of suggestions in Shepodd is unwarranted speculation unsupported by Shepodd's disclosures. Moreover, the economic considerations inherent in Morikawa are equally true here. The present invention is the result of a search for a hydrogen getter material that can withstand conditions in the oil well industry for downhole fiber optic applications (p. 3, 5-15).

Finally, it is certainly well settled that an obviousness rejection cannot rely on the mere fact that the prior art can be modified in the

manner suggested by the Examiner unless the prior art suggested the desirability of the modification. As Applicants have shown above, Shepodd does not teach or suggest hydrogenation of phenyl groups and Morikawa explicitly teaches away from hydrogenation of these materials at pressures less than one atmosphere, particularly for commercial applications. Moreover, Morikawa teaches that hydrogenation of the ring aromaticity-exhibiting portion ring portion in the molecule proceeds at sufficient rate even at low hydrogen pressure within the range of 5-10 kg/cm^2 (≈5-10 atms.) pressures two to three orders of magnitude greater than that taught by this invention. This further reinforces Applicants' argument that Morikawa teaches away from the invention. There is simply no rationale for combining these references except that provided by the teachings of Applicants' invention.

Based on the argument above, Applicants urge that prima facie case of obviousness has not been made and request reconsideration and allowance of claims 1-33.

Insofar as claims 23-33, the argument above, applies here also. As Applicants have shown in an earlier paper, Morkawa explicitly teaches away from atmospheres containing oxygen or oxygen-containing gases because these gases have an adverse effect on the noble metal Raney catalysts. Shepodd teaches the use of noble metal catalysts, preferably Pd, in hydrogen getter formulations including double or triple bonded alkanes and organic polymers and silicone rubber (*vide supra*) that can be used to remove hydrogen from hydrogen/oxygen atmospheres. Nowhere does Shepodd teach the use of a hydrogen getter formulation comprising

the combination of a noble metal catalyst and phenyl rings for these atmospheres. Examiner's rationale notwithstanding there is simply no motivation to combine Shepodd and Morikawa in the manner suggested.

CONCLUSION

The rejection of claims 1-34 under 35 USC §112 and 35 USC §103(a) having been overcome, Applicants respectfully request reconsideration and withdrawal of the rejection, and that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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Person making Deposit: Jenna Madrid Signature: Jenna Madrid

Application Number: 10/091,044 For Applicant: Shepodd